CHICAGO ELECTRIC® POWER TOOLS

CHIPPER SHREDDER

2.5 HP

Model 66910

SET UP AND OPERATING INSTRUCTIONS



Visit our website at: http://www.harborfreight.com



Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

Revised Manual 10h

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INSTRUCTIONS

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER indicates a **A DANGER** hazardous situation which, if not avoided, will result in death or serious injury.

WARNING indicates a **AWARNING** hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION, used with **ACAUTION** the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE is used to **NOTICE** address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

AWARNING

SJTOW-A.

When using electric gardening equipment,

basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

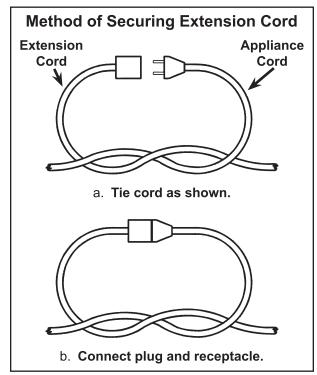
Power Cord Safety

1. WARNING! - To reduce the risk of electric shock, use only with an extension cord intended for outdoor use. such as an extension cord of cord type SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A. or

2. Extension Cord - Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your Chipper Shredder will draw. An undersized extension cord will cause a drop in line voltage resulting in loss of power and overheating.

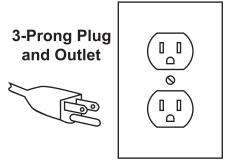
TABLE A - MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLT)						
Ampere Rating	EXTENSION CORD LENGTH					
(at full load)	25'	50'	100'	150'		
0 – 6	18	16	16	14		
6 – 10	18	16	14	12		
10 – 12	16	16	14	12		
12 – 16	14	12	Not recommended			

3. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord. To reduce the risk of disconnection of appliance cord from the extension cord during operating:



- a. Make a knot as shown in Method of Securing Extension Cord; or
- b. Use one of the plug-receptacle retaining straps or connectors described in this manual.
- Ground Fault Circuit Interrupter (GFCI)
 protection should be provided on the
 circuit(s) or outlet(s) to be used for the
 gardening equipment. Receptacles are
 available having built-in GFCI protection
 and may be used for this measure of
 safety.
- 5. Do not abuse the Cord Do not carry appliance by cord or pull on it to disconnect from receptacle. Keep the cord from heat, oil, and sharp edges.

- 6. Use only three-wire outdoor extension cords that have three-prong grounding plugs and grounding receptacles that accept the appliance's plug.
- 7. This Chipper Shredder should be grounded while in use to reduce the risk of electric shock to the operator. The unit is equipped with a 3-conductor cord and 3-prong grounding plug to fit the proper grounding receptacle. The green or green and yellow conductor in the cord is the grounding wire. Do not connect the green or green and yellow wire to a live terminal.



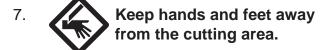
Your unit has a plug as illustrated above. The outlet used should look like the outlet illustrated above. Do not remove the grounding prong from the plug. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

To reduce the risk of electric shock, 8. this appliance has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The power plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician

- to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way. This design is referred to as double-insulated, indicated by \Box .
- 9. WARNING: Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, et seq.)

Personal Safety

- Dress Properly Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of heavy duty work gloves and substantial footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
- Wear ANSI-approved safety goggles and heavy-duty work gloves. Use face or dust mask if the operation is dusty.
- 3. Avoid unintentional starting Do not move plugged-in equipment with your finger on the power switch. Be sure the switch is off when plugging in.
- 4. Do not overreach Keep proper footing and balance at all times.
- 5. Stay alert Watch what you are doing. Use common sense. Do not operate the equipment when you are tired.
- 6. Do not grasp the exposed cutting blades or cutting edges when picking up or holding the equipment.





9.

Keephandsawayfromtheblades.

Wear thick jeans and steeltoed work boots to help prevent injury caused by

flying debris.

Equipment Use and Care

- 1. Avoid a dangerous environment Do not use equipment in damp or wet locations.
- 2. Do not use in rain.
- 3. Keep children away All visitors should be kept at a distance from the work area.
- 4. When servicing use only identical replacement parts.
- 5. Use the right equipment Do not use the equipment for any job except that for which it is intended.
- 6. Do not force the equipment It will do the job better and with less likelihood of injury at the rate for which it was designed.
- 7. Store idle equipment indoors When not in use, equipment should be stored indoors in a clean, dry, safe location out of reach of children.
- 8. Maintain the equipment with care Follow instructions for lubricating and
 changing accessories. Inspect the power
 cord periodically and, if damaged, have it
 repaired by an authorized service facility.
 Inspect extension cords periodically and
 replace if damaged. Keep handles dry,
 clean, and free from oil and grease.
- Check for damaged parts Before using the equipment, checked to determine that all guards will operate properly and perform their intended function. Check

- for misalignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
- Disconnect the equipment Disconnect the equipment from the power supply when not in use, before servicing, when changing blades and other accessories.
- Keep all guards in place and in working order. A guard that is damaged should be properly repaired or replaced by a qualified technician.
- 12. Keep the blades sharp. Using dull blades will cause excessive wear on the motor and will cause jamming.

General Safety

- Never place your hands or any other part of your body or clothing inside the Hopper when the Chipper Shredder is plugged into an electrical outlet.
- 2. Never attempt to cut limbs over 1-1/4" in diameter. Doing so can cause equipment damage and/or serious personal injury.
- 3. This Chipper Shredder should only be operated on a solid, level surface.
- 4. Never feed pieces of metal, rocks, bottles, cans, or other foreign objects into the Chipper Shredder.
- 5. If the cutting mechanism strikes a foreign object or if the Chipper Shredder makes an unusual noise or vibration, immediately turn off the unit. Wait until the Chipper Shredder comes to a complete stop. Disconnect the Power Cord, and take the following steps:
 - a. Remove any foreign or clogged material.

- b. Check for any loose parts and tighten.
- c. Replace or repair damaged parts.
- 6. Periodically stop the Chipper Shredder and check the discharge area to ensure the processed material does not build up and clog the Chute.
- 7. Do not move the Chipper Shredder when the Motor is running or with your finger on the Power Switch.
- 8. Avoid unintentional starting. Prepare to begin work before turning on the Chipper Shredder.
- Do not leave the Chipper Shredder unattended when it is plugged into an electrical outlet. Turn off the unit, and unplug it from its outlet before leaving.
- 10. This product is not a toy. Keep it out of reach of children.
- 11. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
 - Avoid operating alone.
 - Do not use with the Power Switch locked on.
 - Properly maintain and inspect to avoid electrical shock.
- 12. Maintain labels and nameplates on the Chipper Shredder. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 13. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are

factors which cannot be built into this product, but must be supplied by the operator.



SPECIFICATIONS				
Electrical Requirements	120V~ / 60Hz / 15A Motor Speed: 3460 RPM			
Cutting Capacity	1-1/4" Diameter Maximum			
Safety Features	Internal Safety Cut-Off Switch. (When Knobs (11) are loose or Main Housing (14) is open Motor will cease to run.)			
Accessories	Feed Stick 5mm Allen Wrench 6mm Allen Wrench 14mm-17mm Wrench			

UNPACKING

When unpacking, make sure the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at **1-800-444-3353** as soon as possible.

ASSEMBLY



Read the ENTIRE IMPORTANT SAFETY INSTRUCTIONS section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

AWARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch off and unplug the power cord before assembling or making any adjustments.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Phase 1

Note: Leave Bolts (28, 32) only finger tight until the end of Phase 2.
Place cupped side of Curved Washers (27) against Legs (24, 26) during assembly.

1a. Place Axles (25) into Legs (24, 26).

1c. Remove Washers (31, 27) and Bushing (30) from Bolt (32). Insert Bolt (32) through Split Washer (83), Washer (31), Bushing (30), Wheel (29), and Curved Washer (27), in that order. Thread bolt into end of rear Axle (25). Snap a Wheel Cover (33) into place over each hub.

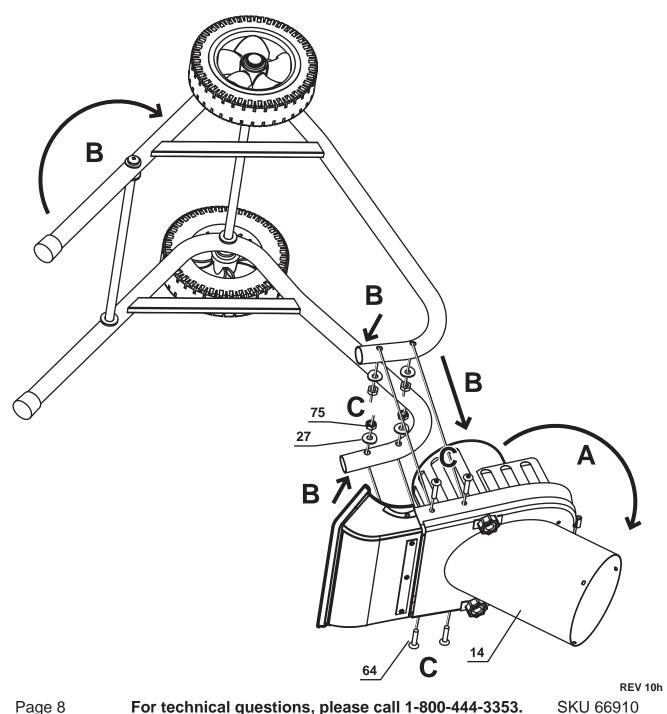
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For technical questions, please call 1-800-444-3353.

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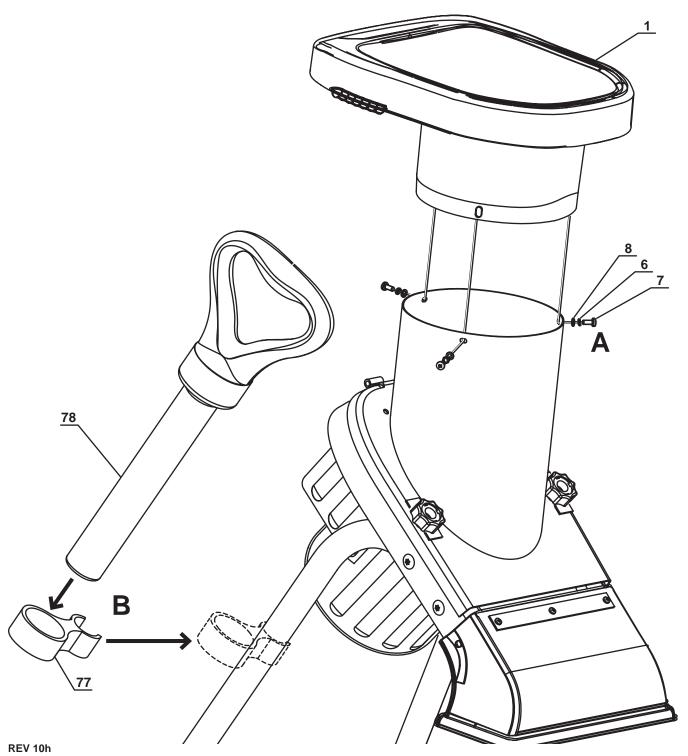
Phase 2

- 2a. Carefully place motor assembly on floor with Main Housing (14) facing down. Main Housing may bend if dropped.
- 2b. Flip Leg assembly over, and squeeze legs together to allow them to be inserted into motor assembly. Line up the holes at the top of the Legs with the holes on the motor assembly.
- 2c. Insert all four Bolts (64) through the sides of the motor assembly and the Leg assembly. Secure with one Curved Washer (27) and Lock Nut (75) each.
- 2d. With assistance, turn the assembly back over. Tighten all Bolts (28, 32, 64) and Lock Nuts (75), including the ones left loose from Phase 1.



Phase 3

- 3a. Place the Hopper (1) onto the Main Housing (14), lining up the three holes in the Main Housing. Secure the Hopper in place using three Washers (8), Spring Washers (6) and Safety Screws (7).
- 3b. Attach the Brace (77) to one of the Legs and insert the Feed Stick (78) into it.

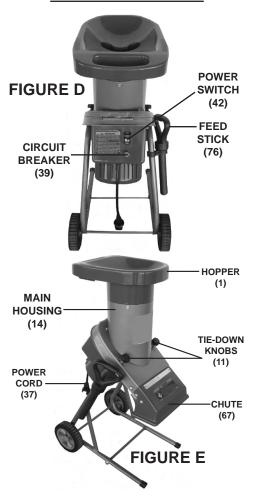


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Product Features



OPERATING INSTRUCTIONS



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

- Before operating, put on ANSI-approved safety glasses under an ANSI-approved full face shield. Also wear heavy duty work gloves and NIOSH-approved dust mask/respirator.
- 2. If an extension cord is used, ensure that it is an outdoor type extension cord and that it is the correct design to accept this appliance's plug.

WARNING! TO PREVENT ELECTRIC SHOCK AND SERIOUS PERSONAL

INJURY: The extension cord must remain secured to the Chipper Shredder's plug. Secure the extension cord by either using the knot method explained in the safety warning section, or by using a device designed specifically for retaining the extension cord (sold separately).

- 3. Position the Chipper Shredder on a flat, level, dry ground surface. Position the machine so that the Chute (67) is pointed in a safe direction, at least 25 feet from any people, animals, or objects. Then, chock both Wheels (29) of the machine with scrap branches or rocks to keep the unit from rolling. (See Figure E.)
- 4. Check to make sure the two Knobs (11) are firmly tightened. The vibration of the unit during normal use will cause the Knobs to loosen and allow the Main Housing (14) to lift up off the Safety Shut-Off Switch (55), turning off the Motor (47) for safety. Tightening the Knobs firmly will engage the Safety Shut-Off Switch and allow the unit to start and run. While the machine is running, periodically check the tension of Tie-Down Knobs. (See Figure E.)
- Insert the yellow Safety Lock-Off Switch into the Power Switch (42). Then turn the Power Switch to its "ON" position. (See Figure D.)
- 6. Allow the Blades (20) to spin up to full speed.
- IMPORTANT: Branches cannot be more than 1-1/4" in diameter. Never attempt to cut limbs over 1-1/4" in diameter. Doing so can cause equipment damage and/or serious personal injury.

- 8. Do not force the Chipper Shredder. Let the natural suction process take in the material to be cut. Always stand clear and to the side of the Chute (67). (See Figure E.)
- 9. Without putting your hands into the Hopper (1), slowly drop the material in (one branch at a time). The machine will pull it in automatically. (See Figure E.)
- 10. WARNING! Never put your hands into the Hopper (1). Always use the Feed Stick (76). (See Figure D.)
- 11. Should the Chipper Shredder jam while in use, immediately turn the Power Switch (42) to its "OFF" position. Unplug the Power Cord (37) from its extension cord. Unscrew and remove the two Knobs (11). Open the Main Housing (14) to expose the two Blades (20). Clear the jam. Close the Housing, and retighten the two Tie-Down Knobs. Then plug the Power Cord into its extension cord, and turn the Power Switch to its "ON" position to resume cutting. (See Figures D and E.)
- 12. NOTE: In extreme working conditions sensors in the Chipper Shredder will automatically switch off the Motor (47) to prevent overheating. In this event, turn the Power Switch (42) to its "OFF" position and unplug the machine from its extension cord. Wait five minutes or until the Motor has cooled. Clear the machine of all debris. Depress the Circuit Breaker (39). Then plug the machine into its extension cord and turn the Power Switch to its "ON" position to resume cutting. (See Figure D.)
- 13. When finished using the Chipper Shredder, turn the Power Switch (42) to its "OFF" position. Remove the Safety Lock-Off Switch from the Power Switch. Then unplug the Power Cord (37) from

- its extension cord. (See Figures D and E.)
- 14. Wait until all moving parts of the Chipper Shredder have stopped moving. Then open the machine and clean out the Hopper (1), Main Housing (14), and Chute (67). (See Figure E.)
- 15. Clean, then store the Chipper Shredder indoors out of reach of children and other unauthorized persons.

NOTE: Performance will decrease as the blades wear.

The blades can be reversed to expose a fresh cutting edge, see Blade Reversal/Removal on page 12.

MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.

AWARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION OR ELECTRIC SHOCK:

Turn the Power Switch (42) of the Chipper Shredder to its "OFF" position and unplug the unit from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

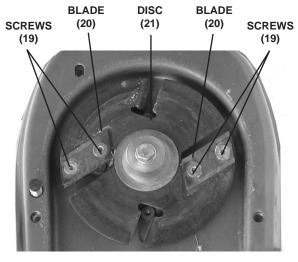
- 1. BEFORE EACH USE, inspect the general condition of the Chipper Shredder. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
- BEFORE AND AFTER EACH USE, clean out debris inside the Hopper (1), Main Housing (14), and Chute (67). Then make sure to tighten the Knobs (11) firmly.
- TO CLEAN THE EXTERIOR PARTS, use only a clean cloth and mild detergent. Do not use solvents. Do not immerse any electrical part of the unit in liquid.

- WHEN STORING, keep the unit in a clean, dry, safe location out of reach of children and other unauthorized persons.
- 5. **AWARNING!** If the Power Cord (37) of this Chipper Shredder is damaged, the Cord must be replaced only by a qualified service technician.

Blade Reversal/Removal

 PERIODICALLY, inspect the two Blades (20). Using dull Blades will cause excessive wear on the Motor (47), and will cause jamming. Reverse or sharpen the Blades when needed. Wear heavy-duty work gloves to avoid accidental cuts to hands and fingers.

To reverse the Blades:



- a. Remove the four Screws (19) that secure the Blades to the Disc (21).
- b. Turn the Blades over to expose the sharp edges.
- c. Then retighten the Screws to secure the Blades to the Disc.

Call 1-800-444-3353 for replacement blades.

TROUBLESHOOTING

AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION OR ELECTRIC SHOCK:

Turn the Power Switch (42) of the Chipper Shredder to its "OFF" position and unplug the unit from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

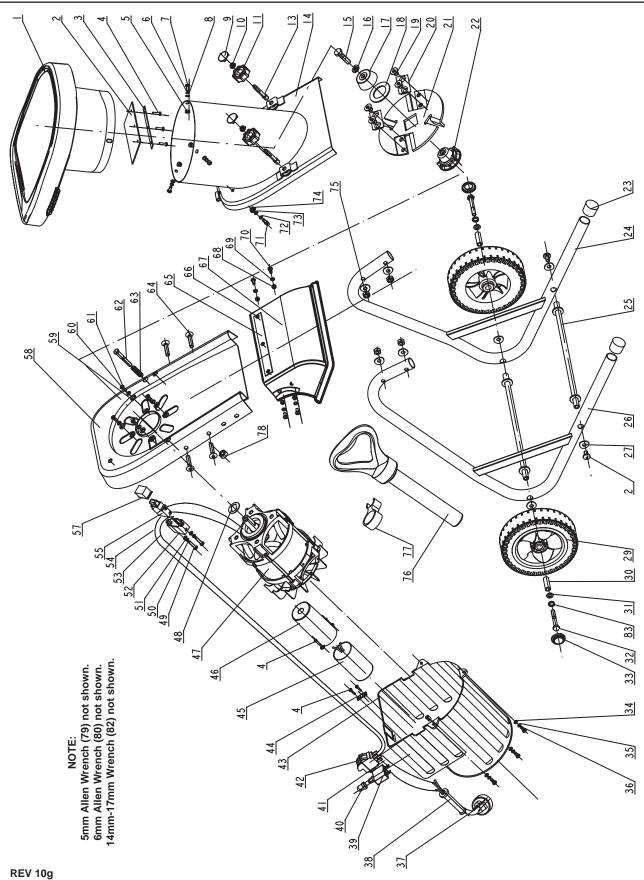
Problem	Possible Cause(s)	Likely Solution(s)
Chipper Shredder will not start.	 No power at outlet. Power Cord (37) not connected. 	 Check power at outlet. Check that Power Cord (37) is plugged in.
	3. Circuit Breaker (39) has tripped.	3. Clean debris inside Hopper (1), Main Housing (14), and Chute (67). Tighten Knobs (11) firmly*. Then reset circuit breakers and restart.
	4. Knobs (11) are loose.	4. Check that Knobs (11) are firmly tightened*.
No cutting action.	1. Unit is clogged with debris.	1. Clean out all debris from unit.
	2. Blades dull or damaged.	2. Replace damaged blades.
Motor sounds as if it is not running properly. Circuit Breaker (39) trips.	Unit is clogged with debris.	Clean out all debris from unit.
Chipper Shredder shuts off for no apparent reason.	Knobs (11) are loose.	Clean out all debris from unit. Check that Knobs (11) are firmly tightened*. Then restart.
		*NOTE: The vibration of the unit during normal use will cause the Knobs to loosen and allow the Main Housing (14) to lift up off the Safety Shut-Off Switch (55), turning off the Motor (47) for safety. Tightening the Knobs firmly will engage the Safety Shut-Off Switch and allow the unit to again start and run.

PARTS LIST

Part	Description	Qty.
1	Hopper	1
2	Hopper Flap	1
3	Press Board	1
4	Screw	3
5	Lock Nut	3 3
6	Flat Washer	3
7	Safety Screw	3
8	Washer	3 2 2
9	Cover	2
10	Nut	2
11	Tie-Down Knob	2
13	Bolt	2
14	Main Housing	1 1
15	Bolt	1
16	Spring Washer	1
17	Fix Board	1
18	Washer	1
19	Screw	4
20	Blade	2
21	Disc	1
22	Disc Base	1
23	End Cap	2
24	Right Support Leg	1
25	Axle	2
26	Left Support Leg	1
27	Washer	4
28	Screw	2
29	Wheel	2
30	Bushing	2
31	Washer	2
32	Screw	2 2 2 2 2 2 2 3
33	Wheel Cover	2
34	Washer	3
35	Spring Washer	3
36	Screw	3
37	Power Cord & Plug	1
38	Protection Tube	1
39	Circuit Breaker	1
40	Nut	1
41	Wire (A)	1

Part	Description	Qty.
42	Power Switch	1
43	Motor Housing	1
44	Cable Fix	1
45	Capacitor	1
46	Covering	1
47	Motor Assembly	1
48	Washer	1
49	Screw	2
50	Spring Washer	
51	Washer	2
52	Switch Shelf	1
53	Wire (B)	1
54	Wire (C)	1
55	Safety Shut-Off Switch	1
57	Cover	1
58	Motor Support	1
59	Washer	1
60	Washer	4
61	Screw	4
62	Screw	4
63	Spring	1
64	Screw	1
65	Steel Pad	4
66	Small Rivet	1
67	Chute	1
68	Lock Nut	4
69	Washer	4
70	Safety Screw	4
71	Screw	4
73	Cupped Washer	4
74	Nut	1
75	Lock Nut	4
76	Feed Stick	1
77	Brace	1
78	Screw	1
79	5mm Allen Wrench	1
80	6mm Allen Wrench	1
82	14mm-17mm Wrench	1
83	Spring Washer	2

ASSEMBLY DIAGRAM



SKU 66910

For technical questions, please call 1-800-444-3353.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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PLEASE READ THE FOLLOWING CAREFULLY

MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS. AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Record Product's Serial Number Here:

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.